

Warrior Health: A Study of Female Veterans with Post-Traumatic Stress Disorder

Symptoms Who Engage in Outdoor Adventure Recreation

Julia Smith

Liberty University

September 15, 2016

ABSTRACT

The purpose of this study was to show the impact of outdoor adventure recreation on female veterans who have experienced post-traumatic stress disorder (PTSD). The study followed a phenomenological approach in order to gain an overall view of what the veterans experienced, using observation and interviews in order to gather information. Conclusions showed female veterans desire female-veteran-only activities; desire relationships with fellow female veterans; and enjoy outdoor adventure recreation that includes teamwork, planned activities, and relaxation. In order to ensure the best possible avenue for PTSD health in female veterans, future research may include a focus on the impact of repeatable trips, more interviews over an extended period of time, as well as, how outdoor adventure recreation is perceived and accepted by different sample groups of female veterans.

Dedication

This thesis is dedicated to the men and women of the armed forces, and the families who support them through their journey.

Acknowledgement

The end product of this thesis would not have been possible without the direction of my God, the love of my family, the support of my friends, the scholarly wisdom of my professors, and the open arms of Warriors on Cataract.

Thank you, Payton, Bailey, Gavin, and Lisette for enduring the life of a single mom who went back to school. It wasn't always easy, and stress sometimes ran high, but I could not have asked for more amazing children to come home to as I made this journey! David, thank you for being willing to love and marry a woman who had four kids and was in the middle of a thesis! You have been such a wonderful support to me. Thank you for your no-nonsense, get-it-done attitude!

To Dr. Zealand, Dr. Akers, Dr. Yocum, Elyse Pinkie, and Chris Amos, thank you for everything you have done in helping me grow through this process. Your words of wisdom, multiple corrections, and endless encouragement have made me a better student and writer. It will not be forgotten.

Fred Solheim, thank you from the bottom of my heart for allowing me to participate in this Warriors on Cataract rafting trip, for without it there may not have been a solid thesis to write. Your passion to provide a safe, fun, healing experience to veterans of the armed forces is unmatched, and for that, we are truly thankful.

Table of Contents

Dedication	i
Acknowledgement	ii
List of Abbreviations	v
CHAPTER ONE – INTRODUCTION	2
Purpose & Significance	4
Statement of the Research	4
Limitations of the Research	5
CHAPTER TWO – REVIEW OF THE LITERATURE	9
Post-Traumatic Stress Disorder Defined	9
Re-Traumatization	11
Veterans & Post-Traumatic Stress Disorder	12
The Female Equation	13
Treatment of Post-Traumatic Stress Disorder	17
Outdoor Recreation as Therapy	19
CHAPTER THREE – RESEARCH METHODS	22
Phenomenological Research	22
Sample	23
Setting	24
Procedures	25
Data Collection	26
Data Analysis	31
CHAPTER FOUR – RESULTS	33

Female-Veteran Specificity.....	33
Teamwork, Planned Activity, & Relaxation.....	37
Relationships	46
Incorporation.....	47
CHAPTER FIVE – DISCUSSION.....	51
The Experience	51
The Impact	53
The Difference	54
Research Conclusions	58
Implications for Future Research.....	60
Closing Thoughts	61
REFERENCES	63
APPENDICES	70

List of Abbreviations

American Therapeutic Recreation Association (ATRA)

Department of Defense (DoD)

Diagnostic & Statistical Manual of Mental Disorders (DSM)

Institutional Review Board (IRB)

Neuro-Emotional Technique (NET)

Post-traumatic Stress Disorder (PTSD)

Veterans Affairs (VA)

Wounded Warrior Project (WWP)

CHAPTER ONE

INTRODUCTION

A soldier wears a uniform. A broken arm dons a cast. A diabetic may wear an insulin pack. A metal plate one may have due to a past trauma can set off an alarm. Each of these is a visible sign, one that is able to let others around them know a little something about the person's situation. Now, let us go back to the uniform. A uniform not only denotes the branch of a service member, but, to the well-trained eye, it also can inform the observer of the number of years served, the service member's rank, and their accomplishments. The uniform has the ability to let the observer know more about that one service member than what one may usually tell any given stranger. However, the uniform will not tell of the experiences this soldier, seaman, or airman has experienced, what they have seen, heard, and felt as they gave of themselves to serve their country.

The release of the recent movie *American Sniper* brought the experiences of those in uniform to the public eye (Eastwood, 2014). The storyline may have been based on the life of Navy Seal Chris Kyle, but there was so much more within the storyline that was brought to the forefront of American minds (Eastwood, 2014). The term post-traumatic stress disorder (PTSD) was not a term that was used or even pointed to within the movie, but the effects and signs of this disorder were clear, not only in the life of Chris Kyle, but also among comrades and those who resided at the Veterans Affairs (VA) hospital (Eastwood, 2014). The effects of PTSD are real and prevalent.

Post-traumatic stress disorder is a syndrome affecting millions (National Institute of Health, 2009). With the prevalence of war and the number of men and women involved, one of the largest growing populations of those who are affected would seem to

be those in the armed forces. The strain of life experiences on female soldiers, and male soldiers alike, takes its toll on this specific population in more ways than the average populace will ever experience. A stark reality of war, mixed with the living conditions and unexpected experiences faced by soldiers, has fed the dramatic increase in those who experience the varied symptoms of post-traumatic stress disorder (Venables, 2013).

Prior to the twentieth century, the idea of a woman experiencing military combat, and, therefore, related post-traumatic stress disorder, outside of what they may have seen as nurses and aids, was unheard of and would have been considered preposterous (Women in the Military, 2012). As time moved on and the World Wars raged, the need for women in secretarial positions increased, and so began the integration of women into the United States Armed Forces (Women in the Military, 2012). The progression of rights and privileges given to women eventually allowed females to participate in and acquire almost every position found within the military (Women in the Military, 2012). Due to this increase in job availability to females, it would not be preposterous to expect the population of female soldiers, and, therefore, female veterans, to increase in number. With this increase in the number of females entering the military, and the documented increase in veterans experiencing PTSD (Venables, 2013), it is reasonable to assume that there would be an increase in the amount of female veterans who experience, and are diagnosed with, post-traumatic stress disorder.

The treatment of many psychological disorders typically includes several types of cognitive therapies used in conjunction with counseling sessions, as well as pharmaceutical measures (Cukor, Spitalnick, Difede, Rizzo, & Rothbaum, 2009). In the last few decades, the possibility of using outdoor recreation for the use of therapy has

come to the forefront and garnered the attention of those seeking to expand the treatment options for veterans (Duvall & Kaplan, 2014). The benefits of being outdoors are widespread and there is a desire to know exactly how veterans who struggle with cognitive disorders and physical disabilities can also benefit (Duvall & Kaplan, 2014).

Purpose & Significance

The following study will be a qualitative view of how female veterans living with PTSD are affected by the inclusion of outdoor adventure recreation in their lives, specifically river rafting. Through research of the literature, a noticeable gap in the research body is related to female veterans who engage in outdoor adventure recreation. The only narrative qualitative research available, surrounding those veterans who have PTSD and take part in outdoor adventure recreation, was focused on the male perspective.

The information gathered from this research will be used to determine possible implications for further study, as well as to provide a baseline for possible alternative treatments of PTSD in female veterans. Specifically, this research assessed the need for an increase in the usage of outdoor adventure recreation among female veterans living with PTSD. The hope is that those who interact with this particular population on a regular basis will not only realize the need, but will take necessary measures to implement outdoor adventure recreation.

Statement of the Research

Though the idea and use of outdoor adventure recreation for therapy is not new (Gas, Gillis, & Russel, 2012), the use of outdoor adventure recreation for therapy among military veterans, females specifically, seems to be more recent. Outdoor adventure

recreation may offer a viable option that can be used in conjunction with other forms of therapy, or on its own, to aid in the mental and physical renewal of health for our female military veterans. The research questions that will be focused on are as follows:

1. What is experienced by female veterans living with PTSD who participate in outdoor adventure recreation?
2. How does outdoor adventure recreation affect female veterans who are living with PTSD?
3. Do female veterans living with PTSD find a difference in how they are affected by therapy involving outdoor recreation and how they are affected by other forms of therapy?

In order to answer these questions, the research took place on a four-day rafting trip down the Colorado River, from Moab, Utah, to Lake Powell, Utah. The research participants were observed and, those who agreed, were interviewed, once during and once after the trip. Specific interview questions were designed to gather information that would answer the above questions to their fullest potential.

Limitations of the Research

Open Trip

This particular rafting trip was open to any female veteran who may have experienced, or is currently experiencing, health related issues that may be cognitively or physically related. For this reason, it was not fully known, until the week of the trip, how many veterans would be taking part and just what their needs were. Measures were taken to pre-register as many women as possible prior to the trip, but there were additions made the week of the trip. An open trip, not designated to any specific health issue, means that

for this specific research project, the number of attendees suffering, or who have suffered directly from PTSD, may range anywhere from one to ten.

The wonderful benefit of an open trip is that it allows the director to embrace all female veterans, regardless of any experience, disability, or diagnosis. While it may be assumed that PTSD is the presiding, and overwhelming, issue of many military veterans, this trip was a great reminder that sometimes there are challenges that veterans deal with other than PTSD. A trip such as this one may have the potential to be as beneficial to them as their comrades, who solely deal with PTSD. There is no doubt that a trip designated solely to those female veterans experiencing PTSD may have been more beneficial to this particular research, but for many veterans, PTSD may not exist at all, or may exist in addition to other diagnoses or disabilities.

Sample Size

The sample size was dictated by the number of females who willingly volunteered to be a part of this study. In all, there were three attendees who agreed to be observed, two of which agreed to be interviewed. While a small number may be considered ideal and/or normal in phenomenological studies, this particular sample size may be considered too small and a limitation. A small sample size may be thought to skew findings, making it more difficult to relate the findings to a larger group.

The voices of many have a tendency to be heard more loudly and responded to more quickly. A larger number may draw more attention to a subject, as well as provide findings that could be considered more solid. However, in order for a single researcher to be able to thoroughly observe the experience as a whole, the sample size has the potential to be too large as well. No matter the size of the sample, every voice of the female

veteran who experiences the effects of PTSD is relevant and should be heard in order to facilitate positive change in the field of therapy.

Lack of Female-Centered Outdoor Adventure Recreation

The ability to acquire more research volunteers, for this particular study, through the avenue of attending another rafting trip was not an option. The availability of outdoor adventure recreation specifically geared towards female veterans is small. When one considers narrowing that category down to include those female veterans who experience PTSD, the number decreases exponentially.

The all-female veteran rafting trip currently occurs only once per year, leaving no chance for further research that may have enhanced the value of this study. Only one other outlet was found that claimed to provide female-only veterans with outdoor adventure recreation. When contacted, no return response was received, which further indicates the need for such programs.

Potential Researcher Bias

I was a military wife for nine years. This experience, in and of itself, allowed me to gain a different sort of insight to those in the military who struggled with PTSD. Whether it was a wife struggling with depression herself, due to the reality that her husband was gone more than she ever expected, or stories from fellow wives about how their husbands handled the stress of the military life, there was no doubt that the military community was different. If the numbers do not tell the story of the truth behind PTSD among military, active and veterans, the openness of this close community does.

Though I have not personally experienced PTSD, I watched my Navy husband struggle with depression that eventually ended in the decision to take his own life.

Through this experience, social media, news media, and the reading of articles to prepare me for this research, there was a need to ignore all I thought I knew about PTSD in order to truly observe changes in those who volunteered to be observed, and to thoroughly hear exactly what the interviewees had to say. As a researcher, I have done my human best to take my opinion out of this paper and to focus on the specific need of female veterans with PTSD.

CHAPTER TWO

REVIEW OF THE LITERATURE

The majority of available research literature has focused on veterans of the Vietnam War, the Persian Gulf War, Operation Desert Storm, Operation Iraqi Freedom, and Operation Enduring Freedom. In an effort to gain a deeper understanding of how veterans acquire and cope with PTSD, and to aid in determining the best avenue for future therapy for these veterans, a thorough understanding of PTSD is important so that one may have a solid grasp on what PTSD is and what previous research tells us. A few questions driving this review of the literature, in order to help establish a baseline for the research, were: How do military veterans acquire PTSD? How does PTSD present itself in veterans? Is there a difference between the way females respond to either of the two previous questions and the responses of their male counterparts? In what ways is PTSD in veterans currently being treated? Is participating in outdoor adventure recreation a viable option as therapy for females who present with signs of PTSD?

Post-Traumatic Stress Disorder Defined

Contrary to what one may assume, the diagnosis of post-traumatic stress disorder has not been around very long. PTSD made its first appearance in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) in 1980 (Sareen, 2014). Even though this particular disorder was acknowledged, as of 1982, there was still a need for PTSD diagnosis standards (Kolk, 2013). While war veterans and those professionals who worked with them were the driving force behind the desire for a specific diagnosis of all they were experiencing, the Department of Veterans Affairs did not see the connection between war and the effects it presumably had on veterans (Kolk, 2013). Eventually,

definitive criteria for diagnosing PTSD were set. The American Psychiatric Association (1994), lists six criteria that must be met in order for one to be considered suffering from PTSD: exposure to a traumatic event; re-experiencing the event; avoiding anything that would prompt memory of the event; an increase in arousal that is relentless; the continual presence of criteria two to four for more than one month; and noticeable suffering or hindrance to what would be considered typical functioning abilities.

PTSD was originally associated with military veterans who had lived through the environment of war (Kolk, 2013). Over time, it became evident that other people, outside of the specific population of war veterans, struggled with many of the same symptoms used to diagnose PTSD (Kolk, 2013). These populations came to include those traumatized by domestic violence, incest, or cases of child abuse (Kolk, 2013). One of the most misunderstood and least considered issues with PTSD is the fact it is usually tied to aspects that are interpersonal, affecting one socially and relationally (Kolk, 2013). This is very true for female veterans of the United States Armed Forces (Benda & House, 2003). The majority of PTSD cases reported among these female vets are centered on rape, abuse, and mistreatment by fellow servicemen (MacNeil, 2006). The U.S. Department of Veteran Affairs (2014) reports an astounding 55% of female veterans under VA care have reported being sexually harassed during their military service. Twenty-three percent reported being sexually assaulted (U.S. Department, 2014). When considering the tie between combat and PTSD in both male and female veterans, each war, from World War I to the present day War on Terror, has seen between 11 and 20% of those who served experience PTSD (U.S. Department, 2014).

According to the National Institute of Health (2009), “PTSD affects about 7.7 million American adults” (p.1). This particular disorder is more common in the female population than the male, affecting ten out of 100 females and four out of 100 males (U.S. Department, 2014). These statistics concern the American population as a whole. Among military veterans, the numbers differ based on the veteran’s time of service (U.S. Department, 2014). Approximately 30% of those who served in the Vietnam War have experienced PTSD; about 12%, per year, of those who served in the Gulf War; and up to 20%, per year, of those who served in Operation Iraqi Freedom and Operation Enduring Freedom (U.S. Department, 2014).

Re-Traumatization

One of the most unfortunate facts about PTSD is that it may take years before it presents itself fully (Chiaromonte, 1992). This is dependent upon what it may take to trigger re-traumatization (Chiaromonte, 1992). Re-traumatization can occur when the veteran watches a broadcast of war coverage, reads a newspaper article, and/or happens to be in a setting where fireworks are being launched (Chiaromonte, 1992). Each of these events characterizes one of the six criteria listed by the American Psychiatric Association (1994).

Re-traumatization has been shown to have a significant negative impact on one’s health (Cloitre, Scarvalone, & Difede, 1997). In, 1997, a study completed by Cloitre, Scarvalone, and Difede, found that women who had been sexually traumatized and were then re-traumatized to be not only positively diagnosed with PTSD, but, also, “were more likely to be alexithymic, show DES scores indicating risk for dissociative disorders and to have attempted suicide” (p. 12). This same study found those women who were re-

traumatized to suffer in areas of interpersonal function (Cloitre, Scarvalone, & Difede, 1997).

Northcut and Kienow (2014) studied the case of a female who experienced military sexual trauma. What they found was that re-traumatization occurred not only when she was diagnosed, but when she was blamed for the incident and then felt it necessary to take the blame for her situation (Northcut & Kienow, 2014). What these studies show collectively is the ability for re-traumatization to occur on many different levels, some of which the average person may not even generally consider. As more information is garnered surrounding the whole of PTSD, to include the possibility of re-traumatization, each element should be considered by those seeking to aid in the health of those female veterans living with PTSD so as to offer the best treatment for the veteran.

Veterans and Post-Traumatic Stress Disorder

An article by Hendin (2014) makes clear that the healing process is not solely dependent on the type of therapy a veteran with PTSD may take part in, but also how vital the connection with the therapist is. This data indicates that a veteran must be able to fully trust his/her therapist in order to completely open up and fully share their experiences (Hendin, 2014). Once they are able to do this, a veteran is open to a therapist giving “him ‘permission’ to forgive himself” (Hendin, 2014, p. 586). According to a study completed in 1984 by Hendin and Pollinger Haas, guilt has an astounding precedence for being a precursor of PTSD and suicide in veterans. A study by Huang and Kashubeck-West (2014) echoed the finding that guilt was an important element seen in those who become diagnosed with PTSD.

Two particular types of guilt are typically present in those veterans with PTSD: combat guilt and survivor guilt (Hendin, 2014). Combat guilt is associated with acts that took place during combat, such as experiencing the death of a comrade or having personally taken another's life in the act of war, specifically a civilian's life (Hendin, 2014). Survivor guilt, on the other hand, can be experienced by those who not only lost a comrade, but feel the guilt of still being alive when they feel undeserving (Hendin, 2014).

Unfortunately, PTSD and the accompanying guilt does not solely affect one's mind. Research by Hoge, Terhakopian, Castro, Messer, and Engel (2007) looked at the connection between PTSD and the veteran's overall physical health. Their research concluded that a strong connection between mental and physical health existed (Hoge, et al., 2007). The veterans who were a part of this study showed a decrease in their general well-being, a higher rate of doctor visits, and a decrease in the number of attended work days (Hoge, et al., 2007). They also found a significant increase in PTSD among those veterans who had been wounded in combat (Hoge, et al., 2007). From this study, we can presume that if the mental health of a patient can be improved, the state of their physical health may also be improved.

The Female Equation

Being a female in the United States Armed Services comes with its own set of challenges. In a male dominated field, many females experience the need to prove one's self and not fail, keeping up appearances in order to not disappoint or be seen as a burden to those whom they work under or with (Gutierrez, et al., 2013). Gutierrez, et al. (2013) found that females often felt a lack of belonging alongside their male counterparts, which in turn was typically connected to PTSD symptoms. Women who took part in this study

found the need to do whatever it took to stuff or numb their feelings, choosing coping strategies that may be deemed abnormal or unstable (Guterrez, et al., 2013). Some of these strategies included crying until they were unable to cry, taking prescription medication or drinking alcohol until sleep was induced, thinking about violence, or taking part in activities that have a higher risk for injury (Guterrez, et al., 2013). In one particular interview, one woman seemed to capture and sum up the thoughts of many others by reminding us that many in the military are not who they were when they return from being overseas (Guterrez, et al., 2013).

The impact of a lack of social networks and friends may be obvious to some, but the lack of familial support needs to be addressed as well. Those who have a supportive family may tend to overlook the truth that many people do not have this privilege. A study of female veterans from the Vietnam War era found the probability for PTSD to increase greatly when they did not receive a positive homecoming from not only friends, but family as well (Fontana, Schwarz, & Rosenheck, 1997). Of those females who were interviewed, 63.6% reported this rejection as being an issue (Fontana, Schwarz, & Rosenheck, 1997). This rejection was related to participation in the war and also sexual trauma, whether personally experienced or ill-placed judgment by means of placing themselves in precarious situations (Fontana, Schwarz, & Rosenheck, 1997). LeAnn Thieman wrote about an experience in *Chicken Soup for the Nurses Soul* (Canfield, Hanson, Autio, & Thieman, 2001) that reiterates, from a first person point of view, the findings of research. The account was featured in the Minority Nurse Newsletter and confirmed the lack of acknowledgment by the general public that females were even involved in the Vietnam War (Nark, 2004).

A study by Benda and House (2003) confirmed differences in PTSD predictors can undoubtedly be found between the male and female genders. Where men tend to present with PTSD in ways that involve alcoholism, substance abuse, thoughts of suicide, pliancy, and stress related to combat, women are more likely to present in ways that center on fear, relational factors, and depression (Benda & House, 2003). One concern of this particular study is that there may be a possible under-diagnosis of PTSD in women (Benda & House, 2003). This may be related to what was discovered in Rothman's (1984) study which showed a lack of seeking out help could aid in there being an under diagnosis.

When it comes to the professional treatment of female veterans, there seems to be a concern for treatment that is done in conjunction with or in the presence of men. While Rothman (1984) may have found that the presence of males could have a therapeutic effect, his research stumbled upon facts that should not be overlooked and should be considered when contemplating future treatment of female veterans who present with PTSD. The appreciation for some normalcy (interaction with men) may be overshadowed by the overall feelings experienced by many of the female patients. Insecurity and a lack of safety were two outstanding concerns of these women (Rothman, 1984). Sexual harassment, propositioning, undesired flirting, violence, and being threatened with violence all contributed to these feelings of insecurity and lack of safety (Rothman, 1984). That said, some women did feel safer at the VA than in public (Rothman, 1984). In addition to Rothman's (1984) findings, the research of Carlson, Layne, Stromwall, and Lietz (2013) echoes the importance and need for women to feel safe in their surroundings. Women also need time to process all they have been through (Carlson, et

al., 2013). Among these two treatment needs, Carlson, et al. (2013), confirms and strongly encourages the use of groups to aid in therapy and socialization.

After gathering statistics from a VA oriented psychiatric facility, it was found that female veterans are less likely to admit themselves to short or long-term hospital care, and are more likely to be seen as outpatients or in emergency situations (Rothman, 1984). On the contrary, their male counterparts were more likely to be treated on an inpatient basis (Rothman, 1984). Today, the literature seems to be focused on how PTSD is being treated once the patient is diagnosed. An article in the *Army Times* clearly shows the gender difference in why males choose not to take medication and why females are more willing (Standifer, 2013). When considering these two articles, it seems reasonable to assume that females may not be admitting themselves because they are willing to use medication much earlier in the process, whereas their male counterparts may put off taking medication and are therefore much more affected over time by their PTSD. This information is important in understanding how and where women are choosing to seek out and receive treatment for their psychiatric and mental health needs.

Another item to make note of when considering the treatment of female veterans is the need for most females to be involved in some sort of social circle (Benda & House, 2003). Benda and House (2003) suggest there is a need for women who are diagnosed with PTSD to increase friendships and the amount of support garnered from their social circles. Many women realize the importance of maintaining friendships and staying connected socially has a significant impact on one's health (Guitierrez et al., 2013). Chiamonte (1992) notes that in his experience as a clinician there is often a need for therapy within a group setting. Conversely, it is important to note that group therapy also

has the potential to make matters worse for some veterans (Chiaromonte, 1992). Guiterrez, et al. (2013) suggests that women, who are able to take part in a group setting where there are shared life experiences, may have a better chance of readjusting to civilian life: “Groups could help normalize their experiences and provide opportunities to learn from others strategies that have worked, and those to avoid” (Guiterrez, et al., 2013, p. 11). The idea for group interaction and creating social circles is not only seen here, but is echoed by Carlson, et al. (2013) and Rothman (1984).

Treatment of Post-Traumatic Stress Disorder

As presented in previous paragraphs, it is clear that treatment choices will not always be obvious. Due to the wide range of problems that can present themselves in those who are traumatized, one of the greatest concerns about PTSD is the treatment. There are many considerations that should be made when deciding how to treat a female veteran who is experiencing PTSD. Aside from social aspects (Benda & House, 2003) and safety concerns (Carlson, et al., 2013), there are other issues to be aware of. Problems commonly presented by veterans can include, but are not limited to, substance abuse and addiction, suicide, and outlandish acts (Kolk, 2013). Often, the most common avenue of treatment is to focus on the individual symptoms as opposed to the overall disorder (Kolk, 2013). For example, PTSD is typically treated first with the use of antidepressants, but there is usually a need for further medication of other symptoms (Sareen, 2014). Using a mixture of pharmaceutical drugs and psychological treatment is the most common form of treatment (Sareen, 2014). In the mid – 1900s, hypnosis became a commonly accepted and used form of psychological treatment for PTSD and tended to

have positive overall results (Kolk, 2013). Due to its negative stigma, this treatment has been halted and is rarely used (Kolk, 2013).

For those who experience insomnia, and/or nightmares, the option for cognitive-behavioral therapy and/or image rehearsal therapy is a viable one. A study completed in 2013 showed that the use of these therapies not only helped the immediate symptoms, but also found the participants experienced an improvement in their overall PTSD symptoms (Margolies, Rybarczyk, Vrana, Leszczyszyn, & Lynch, 2013).

According to Hendin (2014), there is an increasing trend in the thought that clinicians who use multi-faceted therapies may be able to produce better results and experience an increase in overall improvement than those clinicians who only use a single form of therapy. Specifically, it is believed that including psychodynamic therapy, lasting no more than twelve weeks, could also garner significant improvement in veterans who have PTSD and take part in therapy (Hendin, 2014). One other such type of therapy is the use of the Neuro-Emotional Technique (NET). NET was introduced by Scott Walker in the 1980s and is a “psychosomatic stress reduction intervention procedure aimed at improving health” (Walker & Walker, 2010, p. 1). In this particular treatment, stress factors connected between the mind and body are determined using several different methods and then addressed (Walker & Walker, 2010).

A completely different realm of thought can be found in the results of Rothman's (1984) study, which was completed in a VA psychiatric hospital that housed both men and women. The women who were interviewed noted that although there was a lack of privacy and a need for female only restrooms, there was some therapeutic healing that occurred due to the ability to have some interaction with male patients (Rothman, 1984).

This interaction allowed there to be some normalcy close to what was represented in the outside world (Rothman, 1984). The results found by Rothman (1984) suggest that the idea of allowing for normalcy and interaction among patients could in and of itself be a form of treatment.

Outdoor Recreation as Therapy

According to the American Therapeutic Recreation Association (ATRA) (2016), recreational therapy is used to facilitate the progress of multiple areas a patient may need improvement in, including: emotional, cognitive, physical, leisure, and social. Research indicates that those who are able to participate in recreational therapy may experience: an increase in their ability to make decisions; an increase in memory; a decrease in confusion and depression; a change towards the positive concerning the ability to manage their behavior by acquiring skills needed to manage anxiety and stress; and a decrease in isolating one's self, choosing to be with others instead (ATRA, 2003). Many of these findings were echoed in research compiled by Autry (2001), as she studied the effects of adventure therapy, a type of recreational therapy, on girls who were considered at-risk. An added benefit Autry (2001) found was the ability for the girls to take what they had learned and experienced during adventure therapy and continue to use it in their daily life when they returned.

Similarly, outdoor recreation therapy may be able to have some of the same positive effects on military veterans. One of the greatest challenges for those who leave military life and enter back into the civilian world is the ability to make a successful and smooth transition (Gutierrez, et al., 2013). Many find it easier to suppress their feelings and isolate themselves from others than to face the issue and cope (Gutierrez, et al.,

2013). For this reason, finding a situation where female veterans are able to (re)connect with those who have similar backgrounds may be the key in helping hurting females find a brighter road to recovery. Throughout the literature, there are plenty of references to the use of pharmaceutical drugs as well as cognitive and other therapies (Hien, Frances, Lesia, & Lopez-Castro, 2015; Sareen, 2014; Margolies, et al., 2013; Waltman, 2015), but there is a lack of research for the use of outdoor recreation as a type of therapy for veterans with PTSD.

The Warrior Games are a great example of how group and solo sport activity can be used to benefit and encourage those who have PTSD. These games were founded in 2010 and have been supported by the Department of Defense (DoD), VA, and the Wounded Warrior Project (WWP) (Davis, Enos, Jordan, & Belanger, 2013). The purpose of these games is to help the mentally and/or physically wounded warrior by giving them a more positive approach to the life they currently have (Davis, et al., 2013). This is done by focusing on family support and encouragement (Davis, et al., 2013). Some of those who participate in the Warrior Games even go on to compete in the Paralympic Games (Davis, et al., 2013).

Outdoor adventure recreation can offer benefits beyond providing therapy within the setting of a group. Kelley and Coursey (1997) confirmed additional benefits those with mental illness may experience when they take part in outdoor adventure recreation. These benefits include: an increase in self-esteem and self-efficacy; a decrease in anxiety and depression; an increase in trust; and a decrease in sensitivity and hostility on an interpersonal level (Kelley & Coursey, 1997). This same study showed that the contrary occurred for those were considered part of the control group (Kelley & Coursey, 1997).

The findings Kelley and Coursey (1997) found concerning an increase in self-efficacy through outdoor adventure recreation can also be seen in research completed by Paxton and McAvoy (2000). Their research took the findings a step further, noting that one's self-efficacy not only increased during participation in the outdoor adventure recreation, but the level of self-efficacy continued to increase up to six months later (Paxton & McAvoy, 2000).

Elsbeth Ritchie is a retired Army colonel and a psychiatrist. Upon being interviewed by Standifer (2012), it was noted that Ritchie felt it necessary for the Pentagon to seek out alternative forms of treatment for PTSD in lieu of prescription medication (Standifer, 2012). Is it possible that the introduction of outdoor adventure recreation as therapy could be what the government is looking for, a therapy that could be used for active duty and veterans alike? Kaplan (1995) lends great insight to the benefits of nature. He notes there is a "need to reduce the fatigue of directed attention in order to restore effectiveness" (Kaplan, 1995, p. 173-174). Kaplan (1995) continues by explaining how one's ability to be in nature and experience nature has the potential to help an individual accomplish this.

CHAPTER 3

RESEARCH METHODS

Phenomenological Research

In an effort to acquire information concerning the phenomena of female veterans who have experienced PTSD and participate in outdoor adventure recreation, phenomenology was chosen as the preferred research method. Research exemplified the phenomenological framework by studying the specific phenomenon of female veterans with PTSD symptoms partaking in outdoor adventure recreation. Information gathered followed phenomenology by a time of observation and the conducting of an in-depth interview (Patton, 2005).

With the number of cases concerning female veterans living with and experiencing PTSD on the rise, there is a need for further, more specialized research. Through phenomenological research, information gathered by way of observation and interviews has the ability to provide further insight into the post-active duty military lives and treatment of these women. Phenomenological study is described by Creswell (2013) as the type of study that “describes the common meaning for several individuals of their lived experiences of a concept or phenomenon” (p. 76). For this reason, phenomenology has the ability to allow those studying research to view an experience through the eyes and mind of the person who actually went through the experience (Moustakas, 1994). Because of this, phenomenology can also provide the chance to increase the validity of current research.

According to Bruzina (2012), one of the primary factors of phenomenology is an ability to show how an experience comes about, being able to establish where a practice

began. In this particular research, the researcher was seeking to learn whether there are other, possibly better, forms of therapy where healing can begin to occur in the lives of female veterans who have experienced PTSD. Knowing how healing begins and what elements are necessary in order for healing to begin is essential. Being able to critically observe the phenomena of female veterans experiencing outdoor adventure recreation is the beginning. While observation is only one aspect of phenomenology, it is also crucial to be able to ascertain what the participating female veterans experienced and then describe those experiences (Moustakas, 1994). Once this has been accomplished, it should then be possible to extract ideas of significance that will enhance current and future research (Moustakas, 1994). The capability for the researcher to view this experience as a whole, as opposed to only in particular elements, allows the researcher to draw conclusions that are not exclusive. Research that has taken into account the personal experiences of the female veterans, the outdoor environment, and factors affecting each aids in answering what the participant experiences and how they experienced it. These two elements, “what” and “how”, are cornerstones of phenomenology (Creswell, 2013).

Sample

The participants were taken from a group that had already committed, by their own decision, or the decision of their therapist, to take part in the river rafting trip sponsored by Warriors on Cataract, a nonprofit organization. Dr. Fredrick Solheim is the primary organizer and fundraiser of this organization. The main concern of Warriors on Cataract is “supporting the healing and reintegration of our Wounded Warriors into civilian life” (Warriors on Cataract, 2011, para. 1). The organization is able to accomplish this by providing river adventures to veterans with, “very significant levels of

disability, such as severe PTSD, traumatic brain injury, orthopedic injuries, multiple amputations, burns, depression, substance abuse, and those with wheel chairs and service dogs” (Warriors on Cataract, 2011, para. 4). The veteran participants on this particular trip were all females who are currently in the VA or Veterans United Kingdom system. Each woman was confirmed by their recreational therapist to experience a level of PTSD symptoms and to have the potential to benefit from the river rafting trip.

While there were seven female veterans total who were part of the rafting trip, only three of them agreed to be part of the research. Each of them were female and between the ages of thirty and fifty. One participant was African-American. The other two were Caucasian. Two participants were from North America and one was from Great Britain. Three branches of service were recognized. One participant served in the United States Navy, one participant served in the Royal British Army, and one participant served in the United States Army.

Setting

The research took place during an all-female rafting trip hosted by Warriors on Cataract. This was a four-day trip on the Colorado River. The trip launched from Moab, Utah. The first day was rather hot and the waters were fairly calm. The four rafts used for the trip were joined at this point and we were able to walk around, relax and take in some sunshine, or simply get to know the other rafting trip participants. On day two, the river guides gave us our helmets, life jackets, and an hour long talk about the rapids we would encounter over the next two days. The four rafts were disconnected at this point in order to allow for safe navigation of the rapids. It rained the majority of days two and three, making it quite chilly on the river between the canyons. The sun came back out on day

four and our rafts were re-joined. Rain and motor trouble on day three put us slightly behind. In order to keep our time, we ate lunch on the rafts as we made our way to through Canyonlands National Park to Lake Powell.

The nights were spent camping along the river on approved National Park campsites. Most of the trip participants shared tents. I was in my own tent in order to maintain the integrity of my research. We would usually stop around five o'clock in order to get camp set up and dinner started before it got dark. Time on the banks allowed for hiking opportunities during the daylight hours of the evening or morning, and bonfires in the evening to dry clothes, camping gear, and ourselves.

Procedures

Upon receipt of the approval letter from the Institutional Review Board (IRB), I proceeded to confirm plans concerning my attendance on the rafting trip. Two weeks prior to the rafting trip, an e-mail was sent to the registered participants of the rafting trip, via Dr. Fredrick Solheim. This e-mail informed the participants as to who I was and my purpose for joining them on the trip. During the check-in time, I told the rafting participants why I was there and the purpose for my research. Informed consent forms were then collected from each participant who chose to participate in the research. It was then determined as to who was willing to be observed during the trip and/or interviewed during and following the trip.

The rafting trip lasted four days. During this time, research participants were observed, and thorough notes were taken at the end of each day. The two rafting participants who had agreed to be interviewed during the trip were brought into my tent, away from the group, one at a time, to be interviewed (Appendix A). Once the trip ended,

an e-mail was sent to those participants who had agreed to be interviewed, requesting a time for the interview to take place via phone call, Skype, or Facetime. One participant chose Facetime and the other chose a phone call. At the appointed time, contact was made, and the final interview questions were asked (Appendix B). Two interviews were conducted of each research participant, a mid- and post-interview, culminating in four total interviews. Each of the four interviews was recorded by the use of a handheld device, and then transcribed.

Data Collection

Observation

At the initial group meeting, the day before the rafting trip, I informed all who were present of the research I would be conducting. Each attendee was given the chance to sign the waivers and agree to be a research participant. Many seemed excited about the fact that someone was taking an earnest interest in the female military population. Toward the end of the meeting, three ladies agreed to be observed. Only those who agreed to the research conditions were observed for the purposes of this study.

Observation of these three ladies began once their waivers were signed and was ongoing throughout the length of the four-day trip. During the trip, I observed their conversations, actions, reactions, and choice of activities. It was not always possible to be around them throughout the entirety of each day. Activities that were planned while ashore were not mandatory for each attendee and research participants often chose to participate in different activities. I partook in the activity that included the most research participants in order to continue and make the best observations.

As suggested above, it was not possible to observe every research participant at every moment. This added additional observation time for some participants and less observation time for others. Due to research participants being on differing rafts, and the four rafts being separated while we navigated through the rapids, observation while on the river was, at times, hindered, though not impossible. At times, observation was enhanced due simply to the ability to observe responses of the research participants as they encountered outdoor adventure activity in the moment.

Written notes were taken at the end of the day, while in my tent, and consisted of recollections of noticeable highlights that occurred throughout the day. These written notes were stored, along with the recording device, in a small dry box, within a small dry bag, within a large dry bag. For security reasons, this bag was not out of my sight, with the exception of participation in group activities, in which case it was enclosed securely within my personal tent. As data was analyzed, these notes aided in the ability to recall events, conversations, and interactions of the participants throughout the trip.

Interviews

Each interview consisted of seven questions. It was important to incorporate questions that would provide information not seen in the literature review process. Another consideration made when choosing which questions to ask was the need for open-ended questions. Questions that only gave the option for a yes or no answer were not included. Most importantly, the seven questions that were chosen addressed the nature of this research topic. They covered information necessary to garner insight into the proposed research questions. These questions were presented in the form of interviews.

Interviews took place at two points: on day three of the rafting trip and within one month following the rafting trip. These interviews were scheduled at a time that worked best for those participants who had agreed to be interviewed. The mid-trip interview took place one at a time, in my tent, away from the rafting trip participants. The post-trip interview took place via a phone call for one participant and via FaceTime for the other participant. Each interview was recorded, with the participant's permission, on a hand-held device, so as to be transcribed and studied at a later date. There were no written notes of the interviews.

Neither of the interviews were timed. Each participant was allowed to answer as they felt necessary and in the amount of time it took them to feel they had fully answered each question. Their times varied for each interview, with the post-trip interviews being longer in nature. Below is the list of questions that were asked during the interview process.

Mid-Trip Interview Questions

1. What did you expect to experience when you decided to be a part of this rafting trip?
2. What differences are you finding between participating in outdoor adventure recreation and participating in other forms of therapy?
3. What natural elements of this outdoor adventure recreation activity are you finding as beneficial and/or refreshing?
4. Tell me what additional aspects of the rafting trip you are finding to be beneficial.
5. Tell me how participating in group recreation with fellow service members is different than group recreation with civilians.

6. If you were to make a comparison between the typical therapy one may receive for PTSD and participating in this rafting trip, what elements stand out on the rafting trip that you would like to see incorporated into therapy on a regular basis?
7. How do you think this outdoor adventure recreation activity will change how you approach daily life when you return home?

Post-Trip Interview Questions

1. Can you describe your experience as a participant of the rafting trip?
2. What differences did you find between participating in outdoor adventure recreation and participating in other forms of therapy?
3. What natural elements of this outdoor adventure recreation activity did you find as beneficial and/or refreshing?
4. Tell me what additional aspects of the rafting trip you found to be beneficial.
5. Tell me how participating in group recreation with fellow service members was different than group recreation with civilians.
6. If you were to make a comparison between the typical therapy one may receive for PTSD and participating in this rafting trip, what elements stood out on the rafting trip that you would like to see incorporated into therapy on a regular basis?
7. How do you think this outdoor adventure recreation activity has changed how you approach daily life since your return home?

Following the interviews, data was stored in a secure location so as to not jeopardize the identity or privacy of the participants. At the completion of the interviews occurring mid-trip, the recording device was stored in a small dry box, within a small dry bag, within a large dry bag. Upon returning to Virginia, and once the post-trip interviews

were completed, the recorder and transcription were stored in a locked file cabinet in my office, only to be taken out as necessary to conduct data analysis.

Mid-trip interview. On the third evening of the trip, the time came to conduct the mid-trip interviews. We had been dodging periods of pouring rain throughout the day, and that evening was no different. The only comfortable, dry spot was my tent. I had set my tent far enough away from the activities of the camp in order to be able to conduct the interviews as privately as possible. While the majority of attendees were enjoying the warmth of a good campfire, I quietly asked each research participant to partake in the mid-trip interview to which they had originally agreed. There were seven mid-trip interview questions (Appendix A). Each interview lasted approximately 10 to 15 minutes, according to the participant's comfortability with talking to someone about their personal experiences. The interviews went smoothly and, as each one was completed, we re-joined the campfire.

Post-trip interview. Within the month following the trip, I was able to contact both research participants who had agreed to the post-trip interview. Only one of the post-trip interviews was able to be immediately conducted. This interview took place via a phone conversation. The second interview was postponed for two weeks due to medical reasons and was held via FaceTime. There were seven post-trip interview questions (Appendix B). Each post-trip interview lasted 15 to 20 minutes and provided further insight as to how each participant viewed the trip.

Data Analysis

Observation

Three total rafting participants agreed to be observed. Analysis of observed actions and reactions involved studying notes that were taken throughout the trip, as well as mental notes concerning those things which were not able to be written down due to time or position. In order to provide a full and correct analysis that would bring answers and clarity to the phenomena being researched, it was important to view the individual and the trip as a whole. In doing so, the participant's actions and surroundings were both considered as the participant was observed.

Once the why and the whole of observed actions and surroundings were considered, then it was necessary to connect the observations to the research question(s) they answered. Each case was considered individually and then as a part of the research participant group to decipher whether the observed actions were that of an individual phenomenon or rather phenomena that affected the research participants as a whole. Observations of those interviewed allowed for a more in-depth connection as their actions matched their words. Due to only two of the observed participants agreeing to be interviewed as well, considerations of the participant who was not interviewed were solely dependent on what was observed throughout the trip.

Interviews

Two of the three participants who agreed to be observed also agreed to be interviewed. Each of the two participants were interviewed a total of two times: mid-trip and post-trip. This resulted in a total of four interviews. In order to accurately analyze both mid- and post-trip interviews, each were listened to multiple times and then

transcribed in order to have a visual transcript that could easily be compared. To begin with, the first question of the mid-trip interview for each participant was read and then compared to note any similarities and/or differences. Similarities that were noted allowed for a conclusion to be drawn for that particular question. Differences were noted in case there was a response that may be reiterated in any subsequent interview question(s). This process was repeated for both the mid- and post-trip interviews.

Once the above process was complete, comparisons were then made among both the mid- and post-trip interview questions together, beginning with question number one. Once again, similarities and differences were noted. Similarities showed an unchanged view, whereas differences showed changes in the participant's view. This particular process helped to solidify findings and confirm positive changes. In addition to answering research questions for this particular research, it also helped to show potential considerations for future research.

CHAPTER 4

RESULTS

As written in chapter one, there was a list of research questions that were to be the intended focus of this thesis. These questions focused on what the participants experienced, how they were affected, and how they viewed outdoor adventure recreation when compared to traditional forms of therapy. The research led to a few important findings: the need for female-veteran-specific outdoor adventure recreation; a need for outdoor adventure recreation to include elements of teamwork, planned activities, and relaxation; a need for relationships with fellow female veterans who have shared similar experiences; and a need for outdoor adventure recreation to be incorporated into traditional therapy. Each of these elements seem to be necessary for the betterment of female veterans who experience PTSD. In the following results, and throughout the paper, all participants' names have been replaced with pseudonyms in order to protect their identity.

Female-Veteran Specificity

Female-veteran-specific outdoor adventure recreation activities is not only a need, but also a deep desire of female veterans who have experienced PTSD. The two main observed elements that speak to this need is the lack of available trips that meet these particular standards and the lack of literature covering any female-specific outdoor adventure recreation that may be occurring. Early on in the trip, all of the research participants were excited about the lack of males involved on the trip. They chatted about the ability they would have to be completely themselves. Eleanor and Abby implied through their interview answers the importance of the comfortability and vulnerability

they were able to experience within the group and they both had a shared excitement over their new-found relationships:

I expected to have fun, to get together with other women who have been, who have had the same experiences as I have, cuz a lot of times, especially a female military person, unless you've been in the military it's kinda hard to connect with other people cuz you just, so, anyway, I was hoping to connect with others who had some of the same experiences as I had (Eleanor, interview).

It's like being back in the Army again. You meet people, you click like that with them, straight away. You have a laugh, it's just good. That's what I like. That's what I miss. You gotta, I think in the Army, that's really good for people, people who've been in the Army. Cuz that's what you miss when you get out, or when you leave, or you've had to leave. You miss that, that bonding (Abby, interview).

. . . It was really great to be with other people who were in my situation or had been in my situation...just being around others, especially females. Females and military, it's just different. . . So, it's really nice feeling like you're around people who kind of get it and um then when you're doing something hard like whitewater rafting and camping in the rain, it just makes it even better (Eleanor, interview).

In terms of why there is a need for female-veteran activities versus activities that included whomever, consider the answers to interview question number five. Mid-trip interview, question five states: Tell me how participating in group recreation with fellow service members is different than group recreation with civilians? This question drew some passionate responses:

It's so different! . . . I feel like it's way more enjoyable because the things a regular civilian might complain about, you look at each other, you've been to war, or wherever you've been, and so whenever you do it with other people who have been through those same scenarios, it's just easy. You feel connected to them, you feel like you can rely on them. It's almost like this instant bond. Because you've been in situations where you have to rely on strangers with your life and so I feel like it's very different, because you are now with someone else who has also relied on strangers for their life, versus a civilian where you rely on friends and family. That's it. Strangers are different (Eleanor, interview).

Let's be honest, you can see the civies straight away, virtually. Especially, well, eh, soldiers, or ex-soldiers tend to like, get stuck in straight away, and you've all got the same focus on something that needs to get done tends to get done.

Whereas, civies, they don't really go, they fuff about and don't really get it, so the people that have been military tend to get it, or around military. You can see straight away people who haven't at all and they stand out like a sore thumb (Abby, interview).

There were three main themes that emerged from the answers to question five: military personnel get things done, military personnel get each other, and the ability to be with and work with someone who is similar in their training background is better. The point of how different it is to accomplish a task with someone who has shared similar experiences versus someone who has never been there was made clear. To the participants, the idea of being able to experience group recreation with those similar to

them evoked feelings of comfort, enjoyment, and the ability to more readily rely upon someone.

With a few changes in the wording, the answers to post-trip interview question number five elicited much of the same response.

Just because military members have been through so much, there's a lot less . . . for me, it's challenging for me to find, especially women, who don't take things personally. You can tell them to go do something and they just do it and don't go, 'Oh my gosh! You said it to me in this way!' So I found that that was super refreshing, that, you know what, I mean, that everybody's on page that way and you didn't have to walk on eggshells. You know, like, it's, we're all here, we're all grown-ups. People didn't seem to feel entitled, um, you know, and you knew that, I don't know, I think that some people have just used, like children, when they want something they cry and they get it cuz they don't have another way to communicate our needs. And a lot of people don't and so they just whine about it, cry about it and someone meets their needs. Whereas, military members, you know that's not gonna work. That doesn't fly, you figure stuff out, just do it (Eleanor, interview).

Cuz you all have the same ideas, I think the same goals, you know, get stuff done. Get it done as quick as possible. You know, be as efficient as possible, you know, you don't have to tell people twice, where civies, you know, they're hard work. They don't really, they haven't got that sense of, generally they haven't got that sense of service, do you know what I mean? You know, when you're tryin' to get stuff done and they don't work together, like service people do, so that's always

different. . . . And people were willing to make fools of themselves, whereas civilians can't do that, you know what I mean? Oh no, we can't make fools of ourselves! Everybody was willing to open up and have a laugh together cuz that's what service people do (Abby, interview).

The sum of their responses was that when they are with fellow service members, as opposed to civilians, there is an understanding that everyone is on the same page when it comes to getting things done and how each other should be treated. There is an ease of communication amongst service members that is not experienced when the civilian and military company is mixed. Overall, the participants made it clear that being with fellow veterans impacted them in a positive way. The level of enjoyment and peace of mind seem to be dependent upon this preference.

Teamwork, Planned Activity, & Relaxation

This particular research showed that in order for there to be a visible, positive change, there are certain elements each participant of outdoor adventure recreation should be able to experience: teamwork, planned activity, and relaxation. The impact of each element working together was unmistakable through observation. Each participant came away from the trip having fully enjoyed their experience and looking forward to being able to participate in similar, future activities. The actions observed of Bridget showed an increase in health, happiness, and friendship. The actions and words of Eleanor and Abby confirmed the positive impact of nature, teamwork, relaxation, and new relationships:

Well, like I said, the helpin' people and being out in the hulu and having no outside influences and being a little rough and a little dynamics, cuz right from the start we just clicked you know, it was good (Abby, interview)!

So, being in outdoor rec, I feel helps you break that cycle, focus on other things, to be grateful, be reconnected to our body, I think that's huge (Eleanor, interview).

I've relaxed quite massively. I was quite rigid before (Abby, interview).

So, it's really nice feeling like you're around other people who kind of get it and, um, then when you're doing something hard like whitewater rafting and camping in the rain, it just makes it even better (Eleanor, interview).

I think it'll make us want to come back. And keep in touch with people on it to be honest. And you talking' to different people, widening your circle of friends, so you're not just startin' off introverted, little civilian, that isn't really a civilian stuck in a big sea of civilians that doesn't understand you. So, I think I'll want to do more of this (Abby, interview).

Ok, well, um, like forming those relationships. It's um, it's interesting to see that the, you know, somebody said to me, thanks for sharing your story, because on the outside everything looks fine . . . (Eleanor, interview).

. . . Being out here, I was able to write in my journal and kind of go over and process some of that stuff (Eleanor, interview).

Those being observed throughout the duration of the trip each seemed to have a good time and enjoy the company of the other women. None of the participants stayed to themselves or refused to be a part of conversation and activities. Conversations came naturally and jokes flowed as if they had known each other for years. Participants were willing to poke at themselves and make light of the experiences they had been through.

At the same time, they were not hesitant to share their own stories when questions were asked about their personal lives.

They were each involved in doing what was necessary to set up and tear down camp. Being together on river rafts from the beginning encouraged an immediate physical closeness that helped to initiate conversation among the participants. Closeness on the raft was counteracted with an ability for participants to relax and spread out once the rafts docked for the evening. Notes reflected that this did not hinder interaction as participants relied on each other to help set up camp and get situated for the night. The participants helped to ensure all that was entailed in setting up camp was completed before heading off to do their own thing, whether it be sleeping, journaling, or having private conversations with other rafting participants. Most evenings, research participants made sure to spend time with the group before going to bed.

Teamwork

It was clearly observed that each research participant willingly pitched in and participated in any activity that needed to be done. Rafts needed to be unloaded of all personal items, tents needed to be set up, outdoor facilities needed to be erected, and all items necessary for breakfast, lunch, and dinner needed to be unloaded and put together in order for the guides to prepare the meals. Not one research participant sat out of these activities, but willingly did their part.

Along with everything that was observed, several of the interview answers resounded with appreciation for the teamwork shown and shared on the trip:

. . . I think that we've had to work together and that's amazing. Everybody feels like they are contributing, they also feel like people care about them because we help each other (Eleanor, interview).

And then I thought the team aspect as far as setting things up, things like that was beneficial too because it made everybody feel useful, valid, important, all those things (Eleanor, interview).

Everyone helped, you know, it, we even helped people we didn't really like that much, you know (Abby, interview).

Question number two of the post-trip interview asked what differences the participants found in participating in outdoor adventure recreation as opposed to other forms of therapy. Eleanor focused on the lack of distractions, saying:

. . . to be out in with nature, you're really getting more in tune with yourself and you're not being bombarded by all of those distractions. And, like I said, you can just feel overwhelmed with sensory input or overload, and so like even just understanding that there are things that are bigger than you. Especially being in that canyon with those gigantic waterfalls...I think that's one of those things, whenever you get in your head, whenever you become depressed and you kind of disconnect, I think that being in nature is one of the best things that you can do, and I mean especially with water. Water is very therapeutic (interview).

[Rafting] was totally different cuz you're doing stuff and you're not just doing stuff for yourself, you're doing stuff for other people, you know. And hay loadin' boats and you're talkin' to people and you've all had different things, clearances? . . . But you're busy all the time and it helps massively (Abby, interview).

The common thread in both participants' answers was that while they were on the trip, there was lack of focus on one's self. On the contrary, there was a greater need to focus on others and whatever task needed to be completed as opposed to wallowing in one's own personal issues.

Mid-interview question number three states: What natural elements of this outdoor adventure recreation activity are you finding as beneficial and/or refreshing? Both answers to this question pointed to the importance of not only being outside, but that being outside encourages a teamwork philosophy:

Everybody feels like they are contributing, they also feel like people care about them because we help each other. And so some people, um, you know, you may not feel like, especially if you're really depressed, you feel like maybe people don't care, and so you get in an environment like this and you're like, oh my gosh, even strangers care. So, I think that that's great. Like I said, you're reconnecting with your body. You do different things that really push you outside of your comfort zone, your limitations. A lot of times, after you've been through trauma, you tend to really be, kind of go inward and kind of shut down and so you can't out here. You have to participate. In a good way though (Eleanor, interview).

Mmmm, just generally like being with other people who don't have any preconceptions of you. Like when you're stuck inside doing stuff all the time. Well, certain people doing stuff all the time. You can be proactive about stuff rather than just sitting there mullin' it, your thumb up your ass (Abby, interview).

Their answers reflected that the benefits of being outdoors and being active at the same time allows one to be “proactive” and “work together”. They noted that the ability to do this keeps one from merely sitting around doing nothing, which does not help one’s thought process. Eleanor summed it up when she said, “A lot of times after you’ve been through trauma, you tend to really be, kind of go inward, and kind of shut down, and so you can’t out here. You have to participate” (interview).

In interview question number four of the post interview, we find further discussion of teamwork. Question number four asked the participants to share any other aspects of the trip they found to be beneficial. Both participants spoke about the way each participant of the trip worked as a team, helping each other out when necessary. As Eleanor put it, “the team aspect . . . made everybody feel useful, valid, important” (interview). Teamwork among these female veterans was not taken lightly and proved to be an important aspect of how they felt as a whole.

Planned Activities

There were not many planned activities for this trip, but what was planned wisely allowed the participants to have their choice of activities. They could choose to be a part of a group activity away from camp, enjoy downtime with fellow trip participants at camp, or spend quiet time away from the group. Planned activities for this trip included yoga and relaxation techniques in the morning, hikes through the canyons during the day, and campfires as we settled in at night. These activities were not required, but visibly played an important role in how the participants communicated and spent their time.

Yoga was enjoyed by one of the research participants every day, two on some days, and all three on the last. Abby made strides in being willing to join in group

relaxation techniques. At first, she was adamant about not being a part, but on the last day of the trip she was the one to make sure yoga got started and happened before we disembarked for our last day on the river. The first hike was enjoyed by all three research participants. Only two joined in on the second hike. Everyone took place in the campfires, whether out of need due to being soaked and freezing cold, or out of desire to interact with their fellow trip participants. It was a highlight of each day that allowed the participants to rehash all that had happened on the water, enjoy many laughs, and continue to get to know each other.

Relaxation

Relaxation began as soon as the participants made the decision to take part in the rafting trip. The only major plans the participants needed to make were how to get to Moab, Utah. Thanks to volunteers, several of the participants, making flight or auto plans into Denver and then back home was all that was necessary. Everything surrounding who would pick them up at the airport, who they would stay with, meals from that point on, and how they would get to Moab, where we would stay in Moab, how we would get to the embarking site, and all plans surrounding the actual rafting trip were taken care of. While there was much that had to be done by the participants to help get camp set up each evening, the participants were able to relax while the trip guides prepared an abundance of fresh meals. This is what Eleanor had to say:

I thought the logistics of it were amazing, because if you're going through something, it's hard to plan stuff, and so the fact that participants just have to plan how to get to Moab and then everything's just pretty much taken care of from there, I thought that was very beneficial (interview).

During the trip, relaxation was welcomed by the research participants. While each of the planned activities mentioned above could be considered relaxing to some, there were more pertinent forms of relaxation that emerged. Aboard the river rafts, on day one and four, the research participants took time to enjoy the beauty of the canyons and the flow of the river. Lack of rapids on these days also provided time to lay down and even enjoy a nap. On land, Eleanor looked forward to setting up her tent away from the group. Her drive for this was to be able to take time on the trip to get away with her journal, allowing herself time to breathe and digest all that was going on in her life. She expressed on the raft that journaling was important to her and even spoke of having the ability and time to journal in the interview: “. . . so being out here, I was able to write in my journal and kind of go over and process some of that stuff [referring to a conversation had between her and another rafting participant]” (Eleanor, interview). Interview question number three also eluded to specific areas of nature that were enjoyed throughout the trip: sleeping on the ground, witnessing large waterfalls on the edge of the canyons following the rainfalls, the starry night skies, and being able to be on the water in general.

One of the most noted relaxation affects was the positive change in sleep patterns. Bridget and Abby both experienced a better quality of sleep during the trip than they had prior to the trip. On the first day of the trip, Bridget and Abby had trouble with sleeping, something they said was normal for them. Abby (personal communication) said she never slept through the night and Eleanor (personal communication) said she rarely slept through the night. In the mid-trip interview, Eleanor stated, concerning the trip, “You don’t think about, god, I know I haven’t slept this week very much, you don’t think about why you’re not sleepin’” (interview). As early as the second day, both of them were

sleeping better, and even were able to take short naps on the raft. This also may have been due to the lack of access to technology. While there was not a rule for the exclusion of technology, the setting provided limited access to social media, news media, and issues that may be encountered on a daily basis through the use of technological devices. This allowed the participants to focus on the activities at hand, as opposed to any outside influences or concerns. Question number three asked the participants to consider what natural elements of the trip they found to be beneficial and/or refreshing. Almost immediately, each participant clearly and passionately discussed their appreciation for being able to disconnect from the world:

Um, so just being with nature, being unplugged from technology. I think social media plays a real, I think it plays a really insidious mind game on us, especially if you're depressed cuz you sit there and you watch somebody else's social media and you know, you could start to think, um, you know I have these things going on and on one end you could feel like oh it's much better to watch some things going on and be inspired by them, but typically when someone is depressed they're not thinking, 'I'm inspired by their social media,' it typically makes you feel worse about yourself. So, I think just being disconnected from all of that is awesome and I think that we've had to work together and that's amazing (Eleanor, interview).

Eh, cuz you're out there, aren't ya, and you've got no mobile phone, you got nobody ringin' you, no facebook, you've got nothing so you're just out there and you're just. It would be nice if it wasn't as cold and wet, but remember that first night, and it was just well, like, you had a tent, so, you didn't see all the stars, but

I didn't have a tent now and I was just layin' there, lookin' up and wonderin', worrying about snakes and scorpions. It was just nice, just layin' there with no other worries, did ya? No other worries at all, whatsoever. There's nobody textin' ya, or ringin' ya, and e-mailin' ya, and you're at the mercy of the river and the rain and, actually, the bloody rain. . . . But it was lovely because you had no outside influences to annoy you, apart from the engines goin' (Abby, interview).

Specifically relating to nature, each of them had different elements that they enjoyed: sleeping on the ground, witnessing large waterfalls on the edge of the canyons following the rainfalls, the starry night skies, and being able to be on the water in general. Upon returning from the trip, Eleanor's and Abby's comments were similar in that they both felt a renewed appreciation for life and less concern for the small things that tend to be sources of frustration and burden to those who have experienced PTSD.

Relationships

In addition to the above, each research participant garnered new relationships and a greater appreciation for life. Much of these two elements can hardly be found sitting in a room, talking one-on-one with a therapist. Being able to form relationships with others females who had experienced much of the same environment and life experiences was very helpful in allowing the ladies to open up to each other. Their vulnerabilities showed as they talked around the campfire and as they went to their respective tents with other participants. Eleanor was willing to take part in a Neuro Emotional Technique with another rafting participant, a technique that requires the participant to be willing to allow someone see who they are.

Mid-trip interview question number four states: Tell me what additional aspects of the rafting trip you are finding to be beneficial. Though it looked different to each research participant, the ability to build relationships while on the trip was the only additional benefit, outside of nature, mentioned by either. For Eleanor, she valued the relationship aspect for the very reason that it allowed her to share her story with others and, in turn, provide hope for fellow women on the trip:

. . . I did talk about how I've suffered from depression over the years, and you know, people are like, it's sometimes, then they go, 'Oh well, even people that seem totally fine have issues too,' so um, I think that just letting other people know that they're not alone and that there's hope (interview).

For Abby, this meant being able to bond with others and laugh in a way that has not been as easy to do since leaving the Army: "Cuz that's what you miss when you get out, or when you leave, or you've had to leave. You miss that, that bonding. To be honest, like, we had a really good bond, didn't we? We all clicked" (interview).

Incorporation

Concerning the concept of traditional therapy versus outdoor adventure recreation, participants interviewed spoke of a distinct need and desire for the incorporation of outdoor activity in general into traditional therapy practices. Among female veterans who have experienced PTSD there seems to be a strong correlation between being active outdoors and being able to come to a point where they are willing to be vulnerable in their conversation. When considering this particular study, it is safe to say that traditional therapy is not preferred by female veterans who have experienced PTSD. Those interviewed both spoke of a distaste for one-on-one therapy, talking to

people they do not know, and yet a strong appreciation for being outdoors with fellow female veterans or people who had walked a similar path.

The answers given by Eleanor and Abby to mid-trip interview question six helps to express their feelings toward incorporation. It states: If you were to make a comparison between the typical therapy one may receive for PTSD and participating in this rafting trip, what elements stand out on the rafting trip that you would like to see incorporated into therapy on a regular basis?

Actually, I did some group therapy, but I didn't feel like, it wasn't the same as this at all, honestly . . . Maybe have some kind of physical activity that you're doing prior to your session, or after your session, or whatever, like, I feel like your brain processes it in a different way. I used to carry a notebook to the gym with me every single day and it wasn't to write down my workout, it was to write down all the random thoughts that came out of my head as I was working out, because it was like they knocked loose or something, you know and so um, they were some of my best thoughts too, so, maybe some kind of physical activity when it's incorporated, maybe if you're not going out into the wilderness, but maybe you do something, um within that setting. I'm a very physical person, can you tell!? And then most military people are. You don't join the military cuz you just wanna sit around, typically, haha (Eleanor, interview)!

It's too different. It's totally different, totally different. Therapy's always about, about being touchy feely and getting in touch with your, what's in your head and stuff. Maybe it's just me, but I don't think that does it any good. I think you've just gotta move, do stuff to get it out of you. Maybe that's just me, I don't know.

Talkin' about it, soldiers don't like talkin' about stuff, cuz it's like being interviewed. I don't know if you found that, they don't like being interviewed, they're self-conscious. Therapy, they don't, they don't like it. Soldiers, generally, are active people and they like doing stuff, and if you're doing that, then they're happy, rather than sitting down and talking about stuff. And, if you can come out here and do stuff, they just forget about stuff, forget about what's playing in your mind and it works (Abby, interview).

Both participants who were interviewed have been involved in some form of typical therapy and agreed that being able to get outside is better than sitting in an office talking to someone. They also felt that being outside is a pertinent piece needed in helping people deal with their situation(s). The idea that typical therapy could incorporate some sort of outdoor activity, such as walking while you talk, was a common thread in the answers to this question. The bottom line of their responses was that some sort of outdoor activity would be a benefit to the typical therapy session.

In the follow-up interview, the answers to question six remained very much the same. Eleanor laughingly talked about how the fluorescent lighting in offices alone can throw one into depression:

Well, cuz maybe you can't overhaul everything, you can't send everybody out on a rafting trip, but you know, instead of doing your therapy in a, you know, fluorescent lights will throw me into depression, like, I'm pretty sure, PTSD (interview)!

Both participants felt the need to get people outside and talking to be key. They understood the inability for everyone to attend a rafting trip and, yet, the need for

something different to be taking place during typical therapy sessions. Based on their experiences on the rafting trip, they both alluded to the fact that physical movement combined with conversation could make a real difference in a typical therapy session:

Get 'em out and doin' stuff cuz that's what soldiers and service people like doin'.

They like being out and active. They like being busy. They like making fools of themselves, and when they're makin' fools of themselves, they talk about stuff, do you know (Abby, interview)!?

The last statement reiterated all that was observed on the rafting trip. Female veterans want to build relationships with those who understand where they have been and what they have gone through. Being able to get out with other female veterans and partake in activities that require teamwork and effort help to make this attainable. It is important for this particular sample to get away from the pull and omnipresence of today's technology, to embrace the outdoors and the aspects that bonded them in their previous positions.

CHAPTER 5

DISCUSSION

The research gathered fully answers the research questions (Appendix C) and gives the researcher and students of this topic confirmation as to the current situation of those female veterans who have experienced PTSD and are willing and able to take part in outdoor adventure recreation. The research also provides information concerning how different types of therapy are viewed by the participants, including proposed benefits and/or downfalls of each type. In addition, information gathered during the research process points to items of interest that may be considered for future research and/or inclusion within therapy.

The Experience

For each participant, observed and interviewed, it was clear that this rafting trip down the Colorado River and through the canyons was an experience like none other they had ever had. In the beginning there was joy, excitement, anticipation, nervousness, and wonder. As time went on, these feelings remained, but feelings of comfort, inclusion, and ease were soon added. Based on the responses to the interview questions, the later feelings may be due to the camaraderie felt between the female veterans. There was a noticeable comfort level due simply to the lack of men on the trip. As noted earlier, the presence of men can have a negative affect for many women who have been involved in the military (Gutierrez, et al., 2013).

Due to the nature of the rafting trip, there were several elements that added to the experience. Teamwork, staying purposefully busy, and participation may be given up to choice for many, but, for these ladies, it is who they are and what they do. These

elements are all part of their military make-up, so it was very easy for them to jump in and do what needed to get done. Just as we find in Ecclesiastes and the song, “Turn! Turn! Turn!” (Seeger, 1950s), there is a season for everything, this trip provided for times of business, times of utter relaxation, times of exploration, and times of meditation. Observation showed each of the research participants not only experienced each of these times, but embraced each of these opportunities.

Nature also played a vital role in the experience had by the female veterans. Rafting on the Colorado pushed them outside of their comfort zone and at the same time created an environment for deep relaxation and openness. The heightened awareness of possible animals roaming around in the dark, mixed with the sound of new crevasses and walls being created as slabs of rock fell away from the sides of the canyon, contrasted in a lovely way with the peace that was brought by the ability to fall asleep under a blanket of stars as one was lulled to sleep with the rhythm of mighty rushing waters. The two research participants who had struggled with sleeping on the home-front were able to welcome and enjoy sleep on the raft by day and under the stars at night. Medication was not needed, nor was the aid of sleeping devices.

These experiences as a whole promoted a visible, positive change within each of the research participants. To say that any one of the above, on their own, would have attributed to the same response may be assuming a lot. When considering future therapy, this research identifies that there is a need for a solid mixture of elements should the desired end of an activity be to advance the mental health of female veterans who have experienced PTSD. Therapists, doctors, organizations devoted to the health of veterans, and all volunteers associated with any of the aforementioned will be able to use this

research to better patients, past and present, as well as to help restructure and build current and future programs.

The Impact

This outdoor adventure recreation activity allowed the research participants to benefit in ways that were unexpected prior to the trip. The greatest impact mentioned was the ability to connect with the women on the trip and form relationships. While this is an overall desire for the women, their conversations around the campfire eluded to the difficulty they have experienced in building relationships with civilians. The connections each had with the others, by way of a military background, served to encourage the relational aspect immensely. The participants visibly opened up at an increasing rate throughout the trip. Even those who may have been considered outgoing and extroverted in manner were given to sharing and began showing glimpses of vulnerability, both necessary aspects for bonding, growing, and healing.

The research participants returned to their respective homes with a greater appreciation for life. Eleanor stated, "...the canyon...reminds you that there are things that are bigger than you" (interview). Abby said, "I feel as if there's been a weight lifted off my shoulders. Little things don't bother me anymore...I was quite rigid before" (interview). It is clear through these statements that there was a positive, lasting impact experienced due to the nature of the rafting trip.

Each lady observed and interviewed showed, and spoke, of a strong desire to return and take part in the next trip. The fear of the unknown that was brought on by anticipation of the rapids is quickly overshadowed and forgotten when the idea of coming back and experiencing the trip all over again is discussed. The excitement and thrill of

this outdoor adventure recreation becomes the ideal backdrop for these ladies to relax, let their guards down, and serve others. The fact that the ladies were not only affected positively on the trip, but once they were in their own respective homes, helps to explain why they would want to experience this sort of adventure again.

This research identifies the need for therapists and veteran centered organizations to strive for excellence by way of providing female veterans with an experience that is unforgettable and simultaneously promotes overall health and personal growth. This particular experience was top-notch. There were no short-cuts and no lack of care. Even the food was unlike anything the participants expected to eat on a four-day river rafting trip. The ability to send a veteran home smiling with a renewed sense of hope should be the desire of every doctor, therapist, caretaker, organizer, and volunteer.

The Difference

Earlier, I discussed what research suggests about the positive outcomes people are experiencing when they participate in outdoor adventure recreation, but I did not come across any personal accounts as to why an individual would desire to take part in an outdoor adventure recreation activity for therapy in lieu of the traditional therapy approach. I feel having this knowledge could only help to guide military personnel today, and in the future, who struggle with PTSD and are seeking to get the most out of therapy. Knowing the differences between these two types of therapies puts the decision making more easily into the hands of the person who may be suffering from PTSD by giving them an account from others who have walked similar career paths in life and who also shared the label of having PTSD. For this reason, it is included in my research. Below are

the personal accounts of why outdoor adventure recreation used for therapy purposes is different than the traditional therapy approach most are familiar with.

Outdoor Adventure Recreation

Outdoor adventure recreation gets people outside. The benefits of outdoor recreation have not gone unnoticed and researchers have been delving into just how those who get outside are affected. Pretty, et al., (2007) discovered through their research that those who got outside and participated in “green exercise” saw a decrease in anger, confusion, depression, and tension. They also found that their participants had a slight increase in vigor (Pretty, et al., 2007). This is just the beginning of the benefits outdoor adventure recreation has the ability to provide. There were no negative aspects of being outside that were mentioned or observed. Even the rain we encountered was turned into a positive as we laughed, huddled together, and made sure everyone was comfortable.

According to the research participants, taking part in outdoor adventure recreation helps to eliminate the thoughts and worries that may generally be all-consuming. These unwanted thoughts and worries become replaced with busyness and concern for, “your life, your shelter, your food, you’re staying warm, making it out of the water okay” (Eleanor, interview). This thought is in line with Maslow’s hierarchy of needs. Maslow’s hierarchy of needs lists one’s physiological and safety needs as two of five named needs that tend to motivate a human being (Maslow, 1943).

While there may be an overall shift in thought, the participants made it clear that being outdoors also got them talking and made them more vulnerable as the trip went on. Each participant referred to the relationships being built and the busyness associated with outdoor adventure recreation as reasons why they were more willing to open up and be

more vulnerable. Relationally, two research participants were able to open up, during the trip, with someone they met on the trip, by taking part in a one-on-one discussion that involved using the neuro-emotional technique (NET). What makes being involved in this type of discussion stand out is that NET is designed to “combine traditional desensitization principles with complementary modalities” (Monti, Stoner, Zivin, & Schlesinger, 2007, p. 161). Upon observing this interaction and hearing the discussion surrounding all that is involved, this technique does not seem to be a technique one would willingly take part in unless the agreeing party felt completely comfortable with the individual performing the technique. As indicated in the literature review, an interesting side aspect to the NET is that it has been shown to decrease anxiety and stress in individuals (Jensen, 2011; Bablis & Pollard, 2009; Walker & Walker, 2010), so it became an added bonus to the research participants who took part in the trip and the technique. As for the busyness aspect, Eleanor began to explain this element by referring to studies that show the importance of physical movement alone. She summed it up by explaining, “You can access so much more of your brain, of your emotions,” when you’re walking and talking with someone (Eleanor, interview). Abby also tied everything together by saying, “Talkin’ might help, but talking and doing stuff at the same time helps massively...massively” (interview).

Another positive aspect that was briefly mentioned in the post interview by Abby was the availability of “solitude and tranquility”, saying, “when you’re out there you don’t have any issues and worries” (interview). Eleanor echoed the idea that, “being out in fresh air, in nature, it’s so much better” (interview). This was observed to be true for each of the participants. Not once did I hear them talk about what was going on at home,

things they were worried or concerned about, nor did they keep trying to get cell service for their phones in order to stay abreast of what was going on outside of the rafting trip. The ability to walk away from the group, if needed, was appreciated by the participants. Eleanor took advantage of the solitude by using time to journal and refresh her spirit.

The terms solitude and tranquility seem like an oxymoron when you are camped beside a raging river. However, the lack of any outside influence and the abundance of natural beauty lends to the participant the availability of a quiet refuge. In addition to this particular research, there is outside research that also points to these same benefits. Research by Ardahan and Lapa (2011) showed the reason people choose to participate in outdoor recreation is, “to relax, to unwind, to escape from sameness and boredom” (p.1328). Freudenberg and Arlinghaus (2010) found rest and exposure to nature not only to be a benefit of outdoor recreation, fishing in their case, but to be the most significant benefit. This benefit was similar among both participant groups who did and did not have disabilities (Freudenberg & Arlinghaus, 2010). This particular finding is important to this research in that many organizations who provide veteran-specific outdoor adventure recreation often include opportunities for veterans with disabilities.

Traditional Therapy

Both Eleanor and Abby had a difficult time finding a positive for traditional therapy. As stated earlier, there is a lack of ease soldiers have in their willingness to share the full magnitude of their experiences with someone they do not have a trusting relationship with (Hendin, 2014). Eleanor made a statement that could be taken in a positive or negative manner: “I feel like in traditional therapy, a lot of times you’re given the opportunity to go around the issues again and again...” (interview). She went on to

talk about how being able to figure out what is going on in one's head is a good thing and can actually help them "get out of (their) head" (Eleanor, interview).

Abby flat out said, "Therapy, they (soldiers) don't like it." She compared it to being interviewed and that it is an uncomfortable thing for soldiers to do. The participants interviewed referred to therapy offices as being "fluorescent lit" and "sterile". Whether this is the case for most places of therapy, this is their raw impression and a clear view of how they feel about traditional therapy.

The participants spent little time discussing traditional therapy. Most of their time spent on this subject was suggesting how traditional therapy can incorporate elements of outdoor recreation. The comments surrounding traditional therapy were ones encouraging and promoting the benefits that could be gained if simple steps were taken to get clients outside and moving.

Research Conclusions

After a thorough review of the research gathered, there are conclusions that support prior research, as well as new conclusions that can be drawn. One overwhelming theme is the need for relationships to be built among female veterans. The ability for this to occur is primarily based on the length of the activity. When outdoor adventure recreation lasts more than one or two days, there is a need for teamwork and the focus shifts to others, as opposed to one being solely self-centered. The length of the activity shows to be the most important aspect for creating an environment that is most conducive to growth and healing. Growth and healing were shown in this research to come once relationships were built and the participants were able to reach a point of vulnerability.

Relationships that allow for openness, vulnerability, and honesty do not typically occur overnight.

While time and relationships may be an important part in creating an ideal setting for growth and healing, the type of participants in such outdoor adventure recreation activities is just as important and should be highly considered. According to this research, female veterans with PTSD show an undeniable need to be with other female veterans who know how they feel and have encountered many similar life experiences. The research shows this aspect to be key in how they interact, from the time participants meet, all the way through the length of the trip. Veterans tend to have a pre-determined opinion of those who are noted civilians, making the barriers more difficult to breach. In order for female veterans with PTSD to gain the most from their outdoor adventure recreation experience, they should be positioned with female-only groups who are veterans themselves.

Unfortunately, not all veterans are able to attend and take part in outdoor adventure recreation. For these cases, the research shows there is a desire and need for traditional therapists to incorporate some form of outdoor activity into their therapy sessions. The changes may be as simple as allowing the client to lay on the ground or taking a walk outside, to holding sessions at a local park where the client, at the therapist's discretion, can enjoy many elements of nature not typically found within the city. It should be understood that the therapist is at the mercy of what is available within their vicinity, and that creativity and imagination may be an important aspect in implementing elements of nature into therapy.

Implications for Future Research

Limitations of the research have allowed for several implications for further research. Due to the research parameters decided upon prior to the actual research, the impact outdoor adventure recreation had on each research participant can only be determined based on in-trip observations and interviews held during the trip and within one month after the trip. This particular element brings forth several questions. Would observed actions be different if the presence of a researcher was unknown? What variance of answers would have been received at different intervals, such as the beginning of the trip and six months after the trip?

Due to the lack of a repeatable trip, results were based on only one experience. Would repeated, similar experiences affect the participants even further? If so, how often would trips need to be in order to attain significant, sustained healing? How does weather affect the availability of repeated outdoor adventure recreation? Is it necessary to stick with a particular outdoor adventure recreation, or is changing the type of adventure a viable option? When considering the relational aspect of the group, once a group has taken part in an outdoor adventure recreation activity, how important is it to keep the sample the same if repeat trips are found to be necessary?

This particular trip was only four days and three nights long. Is there a particular length a trip should be in order for the participant to attain significant, sustained healing? Was four days and three nights sufficient? Would seven days and six nights be better? Should the time be longer or shorter?

Other elements of the trip that may be considered for future study center around the sample. Future considerations should be made to the gender, integrating male and

female veterans; age, a younger population versus an older population; race; and ethnicity, with considerations being made to each ethnicity's varying military practices. Each of these sample elements has the ability to provide even further information of how outdoor adventure recreation is perceived, as well as whether there is a tendency to choose certain outdoor adventure recreations over others.

Closing Thoughts

Wrapping up this research, it is clear there are many answers still left to unearth by future research. However, there is much to be garnered from the research that was completed. The need for proper healthcare for America's veterans is great. The need for female-veteran-specific healthcare is greater. When considering the healthcare and needs of female veterans who have suffered, or are suffering, with PTSD, it is vital that answers be found. Answers that will not disguise or suppress the symptoms of PTSD, but will promote healing and change are not only important and advantageous to the military community, but to society as a whole.

In order for more outdoor adventure recreation programs to be geared towards female-only veterans, there is a need for increased awareness and funding. It is imperative that there be an increased awareness of female veterans returning to the home-front and that they have specific needs, different from their male counterparts. As awareness increases, there will be an increase in the amount of much needed funding, which, in turn, usually calls for increased research. As more programs become available through the funding, there will be a greater need for volunteers.

As you consider everything you have read, carefully consider the impact you, as an individual, can have on the world around you. The need is great for more impactful

female-veteran-specific healthcare and therapy. Their stories are going unheard and are even dismissed at the expense of their emotional and physical well-being. It is because someone heard and responded to the needs of the ladies in this research that they were able to experience not only the Colorado River and its great canyons, but also to walk away with a new attitude towards life. Whether you choose to help spread the word or to give of your time, your finances, or resources, know that you can make a difference today in the health of a warrior.

References

- American Therapeutic Recreation Association. (2003). *Recreational therapy: a viable option in health and rehabilitation services, treatment to prevention* (2nd ed.). Alexandria, VA: American Therapeutic Recreation Association. Retrieved from http://www.healthpronet.org/ahp_month/07_04.html
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders*, IV edition. Washington, DC: APA
- Ardahan, F., Lapa, T. (2011). Outdoor recreation: The reasons and carried benefits for attending outdoor sports of the participants of cycling and/or trekking activities [Abstract]. *International Journal of Human Sciences*, 8(1), 1327-1341. Retrieved from https://scholar.google.com/scholar?hl=en&q=Outdoor+recreation%3A+the+reasons+and+carried+benefits+for+attending+outdoor+sports+of+the+participants+of+cycling+and%2For+trekking+activities&btnG=&as_sdt=1%2C47&as_sdtp=
- Autry, C. (2001). Adventure therapy with girls at-risk: Responses to outdoor experiential activities. *Therapeutic Recreation Journal* 35(4), 289-306. Retrieved from <http://search.proquest.com/docview/218648438/fulltextPDF/45103C2EFC354D64PQ/1?accountid=12085>
- Bablis, P. & Pollard, H. (2009). Anxiety and depression profile of 188 consecutive new patients presenting to a Neuro-Emotional Technique practitioner. *Journal of Alternative and Complimentary Medicine*, 15(2), 121-127. Doi: 10.1089/acm.2007.0805

- Benda, B. & House, H. (2003). Does PTSD differ according to gender among military veterans? *Journal of Family Social Work*, 7(1), 15-34.
- Bruzina, R. (2012). Then and now. *Journal of Speculative Philosophy*, 26(2), 222-231.
- Carlson, B., Stromwall, L., & Lietz, C. (2013). Mental health issues in recently returning women veterans: Implications for practice. *Social Work*, 58(2), 105-114.
- Chiaramonte, J. (1992). And the war goes on. *Social Work*, 37(5), 469-470.
- Cloitre, M., Scarvalone, P., & Difede, J. (1997). Posttraumatic stress disorder, self- and interpersonal dysfunction among sexually re-traumatized women. *Journal of Traumatic Stress*, 10(3), 437-452. Doi: 10.1002/jts.2490100309
- Duvall, J. & Kaplan, R. (2014). Enhancing the well-being of veterans using extended group-based nature recreation experiences. *Journal of Rehabilitation Research and Development*, 51(5), 685-696.
- Eastwood, C. (Producer & Director). (2014). *American sniper*. United States: Warner Bros. Pictures.
- Canfield, J. Hanson, M., Autio, N., & Thieman, L. (2001). *Chicken soup for the nurse's soul*. United States: Health Communications, Incorporated.
- Cukor, J., Spitalnick, J., Difede, J., Rizzo, A., & Rothbaum, B. (2009). Emerging treatments for PTSD. *Clinical Psychology Review*, 29(8), 715-726.
- Creswell, J.W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Davis, R., Enos, M., Jordan, L., & Belanger, J. (2013). The 2013 Warrior Games: More than a competition. *Palaestra*, 27(4), 43-49. Retrieved from http://go.galegroup.com.ezproxy.liberty.edu:2048/ps/i.do?p=ITOF&u=vic_liberty

&id=GALE|A356906397&v=2.1&it=r&sid=summon&userGroup=vic_liberty&authCount=1#

- Fontana, A., Schwartz, L.S., Resenheck, R. (1997). Posttraumatic stress disorder among female Vietnam veterans: A casual model of etiology. *American Journal of Public Health, 87*(2), 196-175. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1380789/pdf/amjph00501-0027.pdf>
- Freudenberg, P., & Arlinghaus, R. (2010). Benefits and constraints of outdoor recreation for people with physical disabilities: Inferences from recreational fishing. *Leisure Sciences, 32*(1), 55-71.
- Gas, M., Gillis, H., & Keith, R. (2012). *Adventure therapy: Theory, research, and practice*. New York, NY: Routledge Taylor & Francis Group.
- Gutierrez, P.M., Brenner, L.A., Rings, J.A., Devore, M.D., Kelly, P.J., Staves, P.J., . . . Kaplan, M.S. (2013). A qualitative description of female veterans' deployment-related experiences and potential suicide risk factors. *Journal of Clinical Psychology 69*(9), 923-935.
- Hendin, H. (2014). An innovative approach to treating combat veterans with PTSD at risk for suicide. *Suicide & Life-Threatening Behavior, 44*(5), 582-590.
doi:10.1111/sltb.12135
- Hendin, H. & Pollinger Haas, A. (1984). *Wounds of war: The psychological aftermath of combat in Vietnam*. New York: Basic Books.
- Hien, D., Levin, F., Ruglass, L., Lopez-Castro, T. (2015). Enhancing the effects of cognitive behavioral therapy with antidepressant medication: A randomized

- clinical trial. *Drug and Alcohol Dependence*, 146, 142. doi:
10.1016/j.drugalcdep.2014.09.303
- Hoge, C., Terhakopian, A., Castro, C., Messer, S., & Engel, C. (2007). Association of posttraumatic stress disorder with somatic symptoms, health care visits, and absenteeism among Iraq war veterans. *American Journal of Psychiatry*, 164, 150-153.
- Huang, H., & Kashubeck-West, S. (2015). Exposure, agency, perceived threat, and guilt as predictors of posttraumatic stress disorder in veterans. *Journal of Counseling & Development*, 93(1), 3-13. doi:10.1002/j.1556-6676.2015.00176.x
- Jensen, A. (2011). The use of neuro emotional technique with competitive rowers: A case series. *Journal of Chiropractic Medicine*, 10(2), 111-117. doi:
10.1016/j.jcm.2010.12.001
- Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15(3), 169-182.
- Kelley, M. P., & Coursey, R. D. (1997). Therapeutic adventures outdoors: A demonstration of benefits for people with mental illness. *Psychiatric Rehabilitation Journal*, 20(4), 61-74.
- Kolk, B., & Najavits, L. M. (2013). Interview: What is PTSD really? Surprises, twists of history, and the politics of diagnosis and treatment. *Journal of Clinical Psychology*, 69(5), 516-522. doi:10.1002/jclp.21992
- MacNeil, J. S. (2006, December). For many female vets, PTSD tied to sex trauma. *Clinical Psychiatry News*, 34(12), 1+.

- Margolies, S. O., Rybarczyk, B., Vrana, S. R., Leszczyszyn, D. J., & Lynch, J. (2013). Efficacy of a cognitive-behavioral treatment for insomnia and nightmares in Afghanistan and Iraq veterans with PTSD. *Journal Of Clinical Psychology, 69*(10), 1026-1042. doi:10.1002/jclp.21970
- Maslow, A. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370-396. Retrieved from <http://psycnet.apa.org.ezproxy.liberty.edu:2048/journals/rev/50/4/370>
- Monti, D., Stoner, G., & Schlesinger, M. (2007). Short term correlates of the neuro emotional technique for cancer-related traumatic stress symptoms: A pilot case series. *Journal of Cancer Survivorship, 1*(2), 161-166. Retrieved from <http://link.springer.com.ezproxy.liberty.edu:2048/article/10.1007%2Fs11764-007-0018-x>
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.
- Nark, J. (2004). Women in the military. *Minority Nurse Newsletter, 11*(4), 1-2. Retrieved from <http://search.proquest.com/docview/219501245?accountid=12085>
- NIH Medline Plus (2009). PTSD: A growing epidemic. *NIH Medline Plus, 4*(1), 10-14. Retrieved from <http://www.nlm.nih.gov/medlineplus/magazine/issues/winter09/articles/winter09pg10-14.html>
- Northcut, T. & Kienow, A. (2014). The trauma trifecta of military sexual trauma: A case study illustrating the integration of mind and body in clinical work with survivors

- of MST. *Clinical Social Work Journal*, 42(3), 247-259. Retrieved from <http://link.springer.com/article/10.1007%2Fs10615-014-0479-0>
- Patton, M.Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Paxton, T. and McAvoy, L. (2000). Social Psychological benefits of a wilderness adventure program. *USDA Forest Service Proceedings*, 15(3), 202-206. Retrieved from https://www.wilderness.net/library/documents/science1999/Volume3/Paxton_3-27.pdf
- Pretty, J., Peacock, J., Hine, R., Sellens, M., South, N., & Griffin, M. (2007). Green exercise in the UK countryside: Effects on health and psychological well-being, and implications for policy and planning. *Journal of Environmental Planning and Management*, 50(2), 211-231.
- Rothman, G. H. (1984). Needs of female patients in a veterans psychiatric hospital. *Social Work*, 29(4), 380-385.
- Sareen, J. (2014). Posttraumatic Stress Disorder in Adults: Impact, Comorbidity, Risk Factors, and Treatment. *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, 59(9), 460–467.
- Seeger, P. (1950s). Turn! Turn! Turn [Recorded by The Byrds]. On *Turn! Turn! Turn!* [Record]. Hollywood, CA: Columbia Studios.
- Standifer, C. (2012). PTSD diagnosis rates rise among female troops. *Army Times*. Retrieved from

<http://archive.armytimes.com/article/20120312/NEWS/203120320/PTSD-diagnosis-rates-rise-among-female-troops>

U.S. Department of Veterans Affairs (2014). PTSD: National center for PTSD. Retrieved from <http://www.ptsd.va.gov/public/PTSD-overview/basics/how-common-is-ptsd.asp>

Venables, M. (2013). Operation: Supply drop: Fighting PTSD and bolstering troop morale, one video game care package at a time. *Forbes*. Retrieved from <http://www.forbes.com/sites/michaelvenables/2013/03/01/operation-supply-drop-fighting-ptsd-and-bolstering-morale-on-the-front-lines/>

Walker, S., & Walker, D. (2010). Chiropractic technique summary: Neuro emotional technique (NET). Retrieved from <http://www.chiroaccess.com/Articles/ChiropracticTechnique-Summary-Neuro-Emotional-Technique-NET.aspx?id=0000185>

Waltman, S. (2015). Functional analysis in differential diagnosis: Using cognitive processing therapy to treat PTSD. *Clinical Case Studies*, 14(6), 422-433. doi: 10.1177/1534650115571003

Warriors on Cataract. (2011) Retrieved from <http://www.warriorsoncataract.org/wp/>

Women in the military. (2012, Feb 10). *Investor's Business Daily*. Retrieved from <http://search.proquest.com/docview/920670242?accountid=12085>

Appendix A

Mid-Trip Interview Questions

1. What did you expect to experience when you decided to be a part of this rafting trip?
2. What differences are you finding between participating in outdoor adventure recreation and participating in other forms of therapy?
3. What natural elements of this outdoor adventure recreation activity are you finding as beneficial and/or refreshing?
4. Tell me what additional aspects of the rafting trip you are finding to be beneficial.
5. Tell me how participating in group recreation with fellow service members is different than group recreation with civilians.
6. If you were to make a comparison between the typical therapy one may receive for PTSD and participating in this rafting trip, what elements stand out on the rafting trip that you would like to see incorporated into therapy on a regular basis?
7. How do you think this outdoor adventure recreation activity will change how you approach daily life when you return home?

Appendix B

Post-Trip Interview Questions

1. Can you describe your experience as a participant of the rafting trip?
2. What differences did you find between participating in outdoor adventure recreation and participating in other forms of therapy?
3. What natural elements of this outdoor adventure recreation activity did you find as beneficial and/or refreshing?
4. Tell me what additional aspects of the rafting trip you found to be beneficial.
5. Tell me how participating in group recreation with fellow service members was different than group recreation with civilians.
6. If you were to make a comparison between the typical therapy one may receive for PTSD and participating in this rafting trip, what elements stood out on the rafting trip that you would like to see incorporated into therapy on a regular basis?
7. How do you think this outdoor adventure recreation activity has changed how you approach daily life since your return home?

Appendix C

Research Questions

1. What is experienced by female veterans living with PTSD who participate in outdoor adventure recreation?
2. How does outdoor adventure recreation affect female veterans who are living with PTSD?
3. Do female veterans living with PTSD find a difference in how they are affected by therapy involving outdoor recreation and how they are affected by other forms of therapy?

Appendix D

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

May 7, 2015

Julia Anderson

IRB Approval 2186.050715: Warrior Health: A Study of Female Veterans with Post-Traumatic Stress Disorder Symptoms Who Participate in Outdoor Adventure Recreation

Dear Julia,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

Fernando Garzon, Psy.D.
Professor, IRB Chair
Counseling

(434) 592-4054

LIBERTY
UNIVERSITY.

Liberty University | Training Champions for Christ since 1971